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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,876	02/03/2004	Richard H. Blunk	GP-301597	1052

7590 05/30/2007
CARY W. BROOKS
General Motors Corporation
Legal Staff, Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

YUAN, DAH WEI D

ART UNIT	PAPER NUMBER
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1745

MAIL DATE	DELIVERY MODE
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05/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/770,876

Applicant(s)

BLUNK ET AL.

Examiner

Dah-Wei D. Yuan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) 19-21 and 26-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-25 and 31-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02032004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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LOW CONTACT RESISTANCE PEM FUEL CELL

Examiner: Yuan

S.N. 10/770,876

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May 23, 2007

Election/Restrictions

1. Applicant's election with traverse of Group II-2, claims 22-25, in Paper filed May 2, 2007 is acknowledged. The traversal is on the ground(s) that no serious burden on the examiner to search the three distinct species of the claimed invention. This is not found persuasive because regardless of search method, invention of different limitations will require different search strategies, and the times to consider the relevancy of collective references would increase proportionally as well.

The requirement is still deemed proper and is therefore made FINAL. Therefore, claims 19-21,26-30 are withdrawn from consideration. Claims 31-36 were added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 22-25,31-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Fronk et al. (US 6,372,376 B1).

With respect to claims 22,24, Fronk et al. teach a method of making a current collector for a fuel cell comprising coating a metal substrate with a layer of protective coating. The coating comprises a mixture of electrically conductive particles dispersed throughout an oxidant-resistant and acid-resistant, water-insoluble polymeric matrix. The mixture comprises graphite particles (filler) and other electrically conductive particles selected from the group consisting of gold and carbon (particle). The mix is applied to the substrate followed by drying and curing of the coating. See Column 6, Lines 1-51, Claim 1.

With respect to claims 23,34 Fronk et al. teach the coating can be applied by spraying the particles onto the substrate. See Column 5, Lines 21-23. Fronk et al. do not specifically disclose the spraying pressure of the coating. However, it is the position of the examiner that such properties of said process are inherent, given that the Fronk and the present application utilizing the same spraying method to apply the coating. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature is necessarily present in that which is described in the reference. Inherency is not established by probabilities or possibilities. In re Robertson, 49 USPQ2d 1949 (1999). Applicant is advised to submit other information with respect to the Fronk's spraying process, if it is shown to be patentably distinct from the instant invention.

With respect to claim 25, Fronk et al. teach the substrate is aluminum or stainless steel. See Column 5, Lines 10-20.

With respect to claims 31,32, Fronk et al. teach the particles is selected from the group consisting of gold, platinum, palladium, rhodium, rare earth metals or carbon. See Claim 1.

With respect to claim 33, Fronk et al. do not specifically disclose the concentration of the particles present in the composite coating. However, it is the position of the examiner that such characteristic is inherent, given that the Fronk and the present application utilizing the same spraying method to apply the coating. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature is necessarily present in that which is described in the reference. Inherency is not established by probabilities or possibilities. In re Robertson, 49 USPQ2d 1949 (1999).

With respect to claim 35, Fronk et al. further teach the method comprising placing a diffusion media (34,36,38,40) adjacent to the current collector. See Figure 1.

With respect to claim 36, Fronk et al. further teach the method comprising placing a MEA (4,6) adjacent to the diffusion media. See Figure 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
May 23, 2007



DAH-WEI YUAN
PRIMARY EXAMINER